

POLYMER ELECTROLYTE MEMBRANE AND METHOD OF PRODUCTION THEREOF

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Abstract of WO0163683

A Polymer Electrolyte Membrane is formed by hot air drying of a membrane formed with an acidic main-polymer having proton conductivity and capability of forming an electrolyte membrane (S12), and then immersing it into a basic polymer solution to impregnate the membrane with the basic polymer (S14). The basic polymer is introduced in a large quantity into a site acting as a proton conduction pass of the main-polymer to take charge of the proton conduction. Since in the Polymer Electrolyte Membrane, a base polymer takes charge of proton conduction as compared with the case where proton takes charge of the proton conduction as a hydrate, the base polymer shows favorable proton conductivity even in a low humidity state at an elevated temperature exceeding boiling point of water.

